

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Joint Application by SBC Communications)
Inc., Southwestern Bell Telephone Company,)
and Southwestern Bell Communications)
Services, Inc. d/b/a Southwestern Bell Long)
Distance for Provision of In-Region,)
InterLATA Services in Arkansas and Missouri)

CC Docket No. 01-194

REPLY AFFIDAVIT OF CAROL A. CHAPMAN

**AFFIDAVIT REGARDING WHOLESALE
PROVISIONING OF ADVANCED SERVICES**

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AUGUST 3, 2001 LETTER FROM FCC DEPUTY GENERAL COUNSEL JOHN A. ROGOVIN TO CONGRESSMAN W. J. TAUZIN	ATTACHMENT A

I, Carol A. Chapman, of lawful age, being duly sworn, depose and state:

INTRODUCTION

1. My name is Carol A. Chapman. I am the same Carol A. Chapman who previously filed an affidavit in this docket.
2. In this reply affidavit, I will address comments made by WorldCom and AT&T regarding Southwestern Bell Telephone Company's ("SWBT") line sharing, line splitting and Broadband Service offerings.
3. As discussed in more detail below, SWBT enables Competitive Local Exchange Carriers ("CLECs") to line share on loops served by remote terminals ("RT") as described in the *Line Sharing Reconsideration Order*.¹ Although AT&T and WorldCom both attempt to confuse the issue associated with SWBT's line sharing obligations, the fact remains that SWBT's current offerings are fully compliant with the current Federal Communications Commission ("Commission") rules.
4. SWBT has also met its obligation to enable CLECs to engage in line splitting as described in the *Texas 271 Order* and the *Line Sharing Reconsideration Order*.²

SWBT has worked cooperatively with CLECs to work through the operational issues associated with line splitting and has committed to offering enhanced ordering

¹ *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Third Report and Order on Reconsideration in CC Docket No. 98-147, Fourth Report and Order on Reconsideration in CC Docket No. 96-98, Third Further Notice of Proposed Rulemaking in CC Docket No. 98-147, Sixth Further Notice of Proposed Rulemaking in CC Docket No. 96-98, 16 FCC Rcd 2101, 2106, ¶ 10 (2001) ("*Line Sharing Reconsideration Order*").

² *Id.*, 16 FCC Rcd 2101, 2110-11, ¶ 19; *Application by SBC Communications Inc., et al., Pursuant to Section 271 of the Telecommunications Act of 1996 To Provide In-Region, InterLATA Services In Texas*, Memorandum Opinion and Order, 15 FCC Rcd 18,354, 18,515, ¶¶ 324-325 (2000) ("*Texas 271 Order*").

capabilities this month.

5. Finally, although SWBT's Broadband Service offering is not an issue in this 271 proceeding, I respond briefly to a few of AT&T and WorldCom's comments on this subject. The Commission's four-part criteria for unbundling packet switching has not been met in Arkansas or Missouri. Nonetheless, SWBT has made this offering available to all CLECs on a non-discriminatory basis.

SWBT COMPLIES WITH ITS OBLIGATION TO OFFER LINE SHARING ON FIBER-FED LOOPS

6. Mr. Finney of AT&T attempts to create confusion³ regarding SWBT's obligation to "unbundle the high frequency portion of *the local loop* even where [SWBT's] voice customer is served by DLC facilities."⁴ Mr. Finney suggests that SWBT is required to offer CLECs a line sharing unbundled network element ("UNE") from the central office to the end user premise on a fiber-fed loop.⁵ Mr. Finney and AT&T misinterpret the Commission's requirements.
7. Paragraph 11 of the *Line Sharing Reconsideration Order* states that CLECs have the option of accessing the high frequency portion of a fiber-fed loop via either a remotely placed Digital Subscriber Line Access Multiplexer ("DSLAM") or a central office-based ("CO-based") DSLAM. Although Mr. Finney attempts to cloud the issue by pointing out that SWBT does not have an offering allowing CLECs to access

³ See *Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Missouri and Arkansas*, Comments of AT&T Corp. at 69, CC Docket No. 01-194 (FCC Filed Sept. 10, 2001) ("*AT&T Brief*"); Comments of AT&T Corp., Declaration of Scott L. Finney ¶ 38 ("*Finney Declaration*").

⁴ *Line Sharing Reconsideration Order*, 16 FCC Rcd 2101, 2106 ¶ 10.

⁵ *Finney Declaration* ¶ 11, *AT&T Brief* at 69-72.

the high frequency portion of a fiber-fed loop utilizing a CO-based DSLAM, he conveniently ignores the reason why such an offering does not exist.

8. As I explained in both my Arkansas and Missouri initial affidavits, and as explained in further detail by Mr. Christopher J. Boyer in his Reply Affidavit, line sharing compatible DSL technologies today do not allow a CLEC to access a fiber-fed loop via their central office located DSLAM equipment.⁶ Mr. Finney does not dispute that due to *technical* limitations, a CLEC cannot access the high frequency portion of a fiber-fed loop utilizing a CO-based DSLAM. And yet, although Mr. Finney makes no claim that such an offering is, in fact, technically feasible, Mr. Finney suggests that SWBT is required to provide it.⁷

9. Mr. Finney's interpretation of the *Line Sharing Reconsideration Order* is also contrary to the *Line Sharing Reconsideration Order Clarification*. In the *Line Sharing Reconsideration Order Clarification*, the Commission clarified that "[t]he *Line Sharing Reconsideration Order* does not alter section 51.319(b)(5) of the Commission's rules, which describes the limited set of circumstances under which an incumbent LEC is required to provide nondiscriminatory access to unbundled packet switching capability."⁸

10. An August 3, 2001 letter from FCC Deputy General Counsel, John A. Rogovin to

⁶ Chapman Arkansas initial affidavit ¶ 105 ("*Arkansas Initial Affidavit*") (App. A – AR, Tab 4 to SWBT's initial AR/MO Application); Chapman Missouri initial affidavit ¶ 105 ("*Missouri Initial Affidavit*") (App. A – MO, Tab 3 to SWBT's initial AR/MO Application).

⁷ *Finney Declaration* ¶ 47; *AT&T Brief* at 69-72.

⁸ *Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of Local Competition Provisions of the Telecommunications Act of 1996*, Order Clarification, 16 FCC Rcd 4628 (2001) ("*Line Sharing Reconsideration Order Clarification*").

Congressman W. J. Tauzin also states that “pursuant to the Commission’s rules, a CLEC seeking to line share when there is fiber deployed in the loop can access the high frequency portion of a copper loop by collocating a DSLAM at the ILEC’s remote terminal and then leasing access to dark fiber or the subloop network element for the transmission of data traffic from the remote terminal to the central office.”⁹

11. Mr. Finney claims that SWBT’s contract language stating that the High Frequency Portion of the Loop (“HFPL”) is “the frequency above the voice band on a copper loop facility that is being used to carry traditional POTS analog circuit-switched voice band transmissions” is “restrictive” and “inconsistent with the *Line Sharing Reconsideration Order*.”¹⁰ However, SWBT’s language is based on the language in the Commission’s rule 47 C.F.R. Section 51.319(h)(1). That rule defines the HFPL as “the frequency range above the voiceband on a copper loop facility that is being used to carry analog circuit-switched voiceband transmissions.” *See* 47 C.F.R. § 51.319(h)(1).

12. Mr. Finney goes on to claim that SWBT’s language would “eliminate SWBT’s obligation to provide line sharing to communities that are served by a combination of fiber and copper facilities.” *Finney Declaration* ¶ 39. This is simply untrue. As I explained in my initial affidavit, CLECs may line share on loops fed by fiber by placing a DSLAM in the field and line sharing over a copper subloop.

⁹ *See* Attachment A, Letter from FCC Deputy General Counsel John A Rogovin to Congressman W. J. Tauzin, Attachment at 3 (Aug. 3, 2001) (“*Rogovin Letter*”).

¹⁰ *Finney Declaration* ¶ 39.

13. Mr. Finney falsely asserts that SWBT has declined access to loops using the Project Pronto network architecture, and that the Broadband Service debate does not relate to packet switching obligations, but only to loop and subloop obligations.¹¹ This is plainly wrong, and in fact Mr. Finney's own affidavit contradicts the claim. Mr. Finney admits that SWBT offers unbundled loops, including Basic Rate Interface ("BRI") and voice grade loops, over the Broadband Service architecture.¹²
14. Mr. Finney attempts to point out a supposed contradiction between SWBT's willingness to offer unbundled loops over the Broadband Service architecture and its inability to offer "end-to-end line sharing over fiber-fed, DLC-equipped loops."¹³ However, as explained in the Reply Affidavit of Mr. Christopher J. Boyer, current technology does not allow a CLEC to place a DSLAM in a central office in order to provide DSL service over a fiber-fed loop. As explained by Mr. Boyer, this is a limitation of current technology. This is not a restriction created by SWBT.
15. Mr. Finney also claims one of SWBT's "main points" is that the "line card is not properly regarded as part of a loop."¹⁴ This misrepresents SWBT's position. SWBT's position is that the Commission has clearly established that the definition of a loop includes attached electronics "except those electronics used for the provision of advanced services, such as Digital Subscriber Line Access Multiplexers."¹⁵

¹¹ *Id.* ¶ 40.

¹² *Id.* ¶¶ 44-45.

¹³ *Id.* ¶ 44; *AT&T Brief* at 70.

¹⁴ *Finney Declaration* ¶ 45, *AT&T Brief* at 70, n 99.

¹⁵ 47 C.F.R. § 51.319(a)(1).

Therefore, attached electronics used for the provision of advanced services would not be included in the definition of an unbundled loop.

16. Similarly, WorldCom claims that “remote terminal electronics are inherent features, functions and capabilities of the loop.”¹⁶ WorldCom’s comments also ignore the Commission’s definition of the loop that specifically excludes electronics used for the provision of advanced services. As explained on page 1 of the attachment to the *Rogovin Letter*, “the Commission’s definition of a loop does not include a DSLAM or remote terminal.” Furthermore, the definition of a loop “expressly excludes electronics used for the provision of advanced services, including DSLAMs.” See *Rogovin Letter* at 1.

17. WorldCom claims that “the only means by which a competitor can provide DSL service on loops served by fiber is to collocate a full DSLAM in SBC’s remote terminal and lease fiber back to the central office.”¹⁷ This statement is incorrect for a number of reasons. In areas where SWBT has made the Broadband Service available, CLECs may provide DSL service utilizing the Broadband Service. Neither are CLECs limited to placing a DSLAM in the RT structure itself. Furthermore, in addition to the option of leasing available dark fiber, the CLEC may also purchase available feeder subloops from the RT to the central office. Lastly, it is unclear what is meant by the term “full” DSLAM. Vendors have developed so-called “pizza-box”

¹⁶ *Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Missouri and Arkansas*, Comments of MCI WorldCom, Inc. at 11-12, CC Docket No. 01-194 (FCC Filed Sept. 10, 2001) (“*WorldCom Brief*”).

¹⁷ *WorldCom Brief* p. 10.

DSLAMs that are smaller than the full-size DSLAMs typically deployed in central offices. These smaller DSLAMs may be better suited for remote locations than full-size DSLAMs.

18. As discussed above, WorldCom admits on page 10 of its brief that CLECs can provide DSL service on loops served by fiber without utilizing SWBT's Broadband Service offering. Yet on page 11 of its brief, WorldCom claims that competitors cannot provide this service without access to the Broadband Service. This claim is clearly false as WorldCom's own brief explains and as addressed in both my Arkansas and Missouri initial affidavits.
19. WorldCom also claims that SWBT's RTs lack sufficient space to allow collocation of DSLAMs. However, SBC's commitment to make available additional collocation space in its RTs (including those in SWBT) is contained in the *Project Pronto Order*.¹⁸ The Commission commented on the impact of SBC's commitments by saying:

In light of SBC's commitment, competing providers of advanced services will receive quantifiable assurances that they will be able to access SBC's remote terminals and compete for consumers served through remote terminals. In this way, SBC's commitment should ensure that competing carriers will be able to offer consumers other types of DSL service through equipment deployed in the remote terminals of SBC's incumbent LECs.¹⁹

20. It is clear that WorldCom's claims in this area are unfounded. WorldCom admits that it has no outstanding requests for collocation of a DSLAM in Arkansas or Missouri.²⁰

¹⁸ *Ameritech Corp., Transferor and SBC Communications, Inc., Transferee for Consent to Transfer Control*, Second Memorandum Opinion and Order, 15 FCC Rcd 17,521, 17,539 ¶ 34 (2000) ("*Project Pronto Order*").

¹⁹ *Id.*

²⁰ *WorldCom Brief* at 11.

Lacking any concrete evidence, WorldCom cites SBC comments made prior to commitments contained in the *Project Pronto Order* as support for its claim.

WorldCom Brief at 11. Obviously, comments made regarding space availability at SBC RTs made prior to SBC's commitment to make additional space available are dated at best.

SWBT IS CURRENTLY MEETING ALL OF ITS LINE SPLITTING OBLIGATIONS

21. As I stated in my initial affidavits, SWBT has been working with CLECs to address the operational issues associated with line splitting, and has committed to introduce a single-line sharing request ("single-LSR") conversion process this month.²¹

WorldCom implies that SWBT is required to offer a single-LSR order process to convert an existing UNE-P arrangement into separate UNEs that may be utilized for line splitting. This is not the case. Instead, in the *Line Sharing Reconsideration Order*, the Commission encouraged ILECs and CLECs to work together to address the operational issues associated with line splitting,²² and that is what SWBT has been doing.

22. WorldCom makes the unsubstantiated allegation that "SBC appears to attempt to leave itself room to back off its October commitment."²³ This is simply wrong. Both my Arkansas and Missouri initial affidavits plainly state "SWBT has committed to introduce a single-LSR conversion process in October of this year."²⁴ SWBT has not

²¹ *Arkansas Initial Affidavit* ¶¶ 114-115; *Missouri Initial Affidavit* ¶¶ 114-115.

²² *Line Sharing Reconsideration Order*, 16 FCC Rcd 2101, 2111-12, ¶ 21.

²³ *WorldCom Brief* at 17.

²⁴ *Arkansas Initial Affidavit* ¶ 115; *Missouri Initial Affidavit* ¶ 115.

changed this commitment.

23. WorldCom also claims that line splitting is a “service” that SWBT must “offer.”²⁵

This is a misuse of terms. Line splitting is not a service provided by SWBT, but an activity performed by the CLEC. Line splitting occurs when a single carrier or two partner carriers provide voice and data services over the same unbundled xDSL-capable loop. SWBT permits CLECs to engage in line splitting where the CLEC purchases the entire loop and provides its own splitter. For instance, if a CLEC is providing voice service using the UNE-platform, it can order an unbundled xDSL-capable loop terminated to a collocated splitter and DSLAM equipment and unbundled switching combined with shared transport, to replace its existing UNE-platform arrangement with a configuration that allows provisioning of both data and voice services. In this situation, SWBT will provide the loop that was part of the existing UNE-platform as the unbundled xDSL-capable loop, unless the loop that was used for the UNE-platform is not capable of supporting xDSL service. A CLEC may also use an unbundled xDSL-capable loop and unbundled switching elements to provide voice and data service to an end user not already served via the UNE-platform. Alternatively, the voice provider may use its own switching equipment to provide the voice service. While this may seem like a minor distinction, it is important to distinguish between SWBT’s obligation to allow a CLEC (or partnering CLECs) to engage in line splitting using available unbundled network elements and a non-existent requirement for SWBT to actually offer some type of “line splitting service” to CLECs.

²⁵ *WorldCom Brief* at 18.

24. Contrary to AT&T's characterization of line splitting,²⁶ the *Line Sharing*

Reconsideration Order did not imply that line splitting was subject to the same terms and conditions as line sharing. Instead, the Commission stated that "independent of the unbundling obligations associated with the high frequency portion of the loop that are described in the *Line Sharing Order*, incumbent LECs must allow competing carriers to offer both voice and data service over a single unbundled loop."²⁷ Unlike line sharing, which is a specific unbundling obligation, "line splitting is only one application of an incumbent LEC's larger obligation under [Commission] rules to provide access to network elements in a manner that allows a competing carrier 'to provide any telecommunications service that can be offered by means of that network element.'"²⁸ Although there are a number of similarities between line sharing and line splitting, the fundamental differences between the two preclude treating them in an identical manner.

SWBT'S BROADBAND SERVICE IS NOT AN ISSUE FOR THIS PROCEEDING

25. Although AT&T and MCI make a number of legal arguments concerning SWBT's Project Pronto network architecture and Broadband Service, the issues really surround claims of entitlement to unbundled packet switching, and these parties do not allege that they actually have been denied access to unbundled packet switching.²⁹ In fact, as I explained in my initial affidavits, no party had requested access to packet

²⁶ *AT&T Brief* at 69, n. 96.

²⁷ *Line Sharing Reconsideration Order*, 16 FCC Rcd 2101, 2110 ¶ 18.

²⁸ *Id.*, 16 FCC Rcd 2101, 2113, ¶ 24.

²⁹ Mr. Finney alleges that SWBT's Broadband Service does not contain packet switching. See *Finney Declaration* ¶ 64; *AT&T Brief* at 71. This is simply wrong, as explained in the reply affidavit of Christopher J. Boyer.

switching in accordance with Commission rules in Arkansas or Missouri.

Accordingly, these parties have not raised a present and concrete issue of compliance for this proceeding.³⁰

26. Mr. Finney contends that the criteria for unbundling packet switching functionality have been met where SWBT has deployed its Broadband Service architecture.³¹ This is simply false. While I will not repeat the reasons explained in my initial affidavits, I will expand upon a few of the relevant points, particularly as they relate to specific points raised by Mr. Finney.

27. Mr. Finney claims that CLECs are “permanently foreclosed from providing DSL services” on all-copper loops to any customers served by the Broadband Service because of “excessive loop lengths or other network conditions.”³² This is not true. CLECs have repeatedly represented that they utilize technologies that differ in capabilities than those used by the ILECs, and that distance limitations vary for different DSL technologies.³³ While in some cases, CLECs may not be able to utilize spare copper facilities to support their desired xDSL service, it is by no means certain that this will always be the case.

³⁰ *Application of SBC Communications, Inc., et al. for Provision of In-Region, InterLATA Services in Kansas and Oklahoma*, Memorandum Opinion and Order, 16 FCC Rcd 6237 ¶¶ 244-45 (2001). (The M2A and the A2A have the same basic terms and conditions for unbundled packet switching as those reviewed by the Commission in the Kansas/Oklahoma proceeding.)

³¹ *Finney Declaration* ¶ 52, *AT&T Brief* at 72-74.

³² *Finney Declaration* ¶ 57; *AT&T Brief* at 73.

³³ *Deployment of Wireline Services Offering Advanced Services Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order in CC Docket No. 98-147 and Fourth Report and Order in CC Docket No. 96-98, 14 FCC Rcd 20,912, 20,953, ¶ 84 (1999).

28. Mr. Finney also implies that SWBT makes an “upgraded” Broadband Service loop available to ASI that is not available to unaffiliated CLECs.³⁴ This is not the case. SWBT offers both ASI and unaffiliated CLECs nondiscriminatory access to the Broadband Service.
29. Mr. Finney makes the false allegation that SWBT “does not permit CLECs to deploy DSLAMs in remote terminals in a nondiscriminatory manner.”³⁵ SWBT permits CLECs to collocate DSLAMs where space is available. In fact, no CLEC – including AT&T – claims that they have been denied access to unbundled packet switching (which requires, as one element, denial of a collocation request). Mr. Finney tries to circumvent the clear language of the Commission’s rules regarding unbundling packet switching. Although the rule specifically states that before an ILEC can be required to unbundle packet switching, a CLEC must have requested to deploy a DSLAM remotely at a specific location and been denied,³⁶ Mr. Finney makes no claim that SWBT has denied such a request.
30. Mr. Finney goes on to claim that SWBT has implied that the Broadband Service offering is a substitution for an unbundling obligation.³⁷ No support for this claim is contained in my Arkansas or Missouri Initial affidavits. In fact, the opposite is true. My initial affidavits state “not only will SWBT provide access to all of the unbundled network elements required, it also has gone beyond the requirements to offer a brand

³⁴ *Finney Declaration* ¶ 58.

³⁵ *Finney Declaration* ¶ 60; *AT&T Brief* at 73.

³⁶ 47 C.F.R. § 51.319 (c)(5).

³⁷ *Finney declaration* ¶ 65.

new option – the Broadband Service.”³⁸ Clearly there is no implication that the Broadband Service relieves SWBT of any of its unbundling obligations. On the contrary, SWBT has met all of its unbundling obligations and has exceeded them by developing and offering a non-required wholesale offering.

31. Mr. Finney even makes the remarkable claim that by voluntarily offering the Broadband Service SWBT admits that unbundled access is needed.³⁹ This is simply ludicrous. Using Mr. Finney’s logic, ILECs could never voluntarily develop any product offering for CLECs.

32. Mr. Finney incorrectly states that SWBT claims that Project Pronto “was undertaken only for CLECs’ use.”⁴⁰ This is not true. Project Pronto goes far beyond the Broadband Service architecture, and was planned to upgrade a number of facilities. The referenced statement contained in my Arkansas and Missouri Initial affidavits was limited to the “packet switching capability” that is “part of the wholesale Broadband Service”⁴¹ and not to Project Pronto as a whole. Once again, Mr. Finney has twisted the facts in order to better support his positions.

33. Mr. Finney claims that CLECs cannot add features and functions that SWBT does not offer as part of its Broadband Service and that CLECs cannot differentiate their services.⁴² This is fundamentally untrue. In actuality, CLECs can differentiate their

³⁸ See *Arkansas Initial Affidavit* ¶ 129 (emphasis added); *Missouri Initial Affidavit* ¶ 129 (emphasis added).

³⁹ *Finney Declaration* ¶ 65.

⁴⁰ *Finney Declaration* ¶ 62.

⁴¹ *Missouri Initial Affidavit* ¶ 147; *Arkansas Initial Affidavit* ¶ 147.

⁴² *Finney Declaration* ¶ 67.

services in a number of ways. For CLECs providing high speed internet access service (an information service), the speed of the DSL transport is only one component of the service. High speed internet access service may be differentiated by price, customer service, ease of installation, and the content (web pages, e-mail boxes and options, etc.) provided. The Broadband Service offered by SWBT is not a retail information service offering that has already been pre-packaged for CLECs. Instead, it is a telecommunications transport service that is used as a wholesale input to the internet access information service provided by CLECs. CLECs have many options to differentiate their services in some or all of these above areas.

34. Finally, Mr. Finney contends that SWBT has made supposed “threats” to halt the deployment of the Broadband Service if SWBT is required to unbundle the Project Pronto architecture.⁴³ However, as this proceeding is not evaluating the pros and cons of establishing new unbundling obligations, my initial affidavits did not address what SWBT’s response might be to any new requirements that might be established for Missouri and Arkansas. Instead, in response to comments previously made by WorldCom, I discussed SBC’s actual response to burdensome regulatory developments in Illinois.

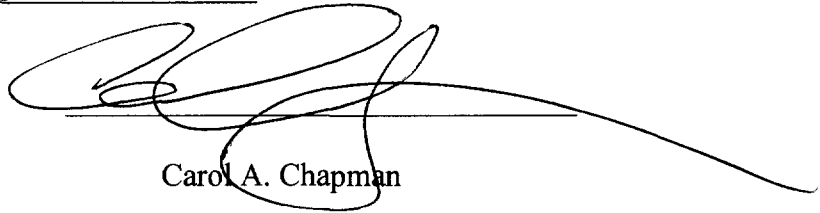
CONCLUSION

35. This concludes my affidavit.

⁴³ *Finney Declaration* ¶ 69; *AT&T Brief* at 75-76.

I state under penalty of perjury that the foregoing is true and correct.

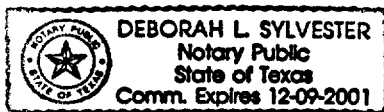
Executed on October 1, 2001.


Carol A. Chapman

STATE OF TEXAS)
COUNTY OF DALLAS)

Subscribed and sworn to before me on this 1st day of October 2001.


Notary Public



A

Chapman Reply Affidavit – Attachment A



Federal Communications Commission
Washington, D.C. 20554

August 3, 2001


The Honorable W.J. ("Billy") Tauzin
Chairman
Committee on Energy and Commerce
United States House of Representatives
2125 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairman Tauzin:

This letter transmits further elaboration on two questions you posed in a letter dated July 18, 2001. I understand that your staff spoke with Ms. Michelle Carey, Chief of the Common Carrier Bureau's Policy Division, and as a result of that conversation, we are providing this subsequent elaboration to our prior response to questions numbered 2 and 4.

We hope that you find this information useful. If you have any further questions, please do not hesitate to call me at 202-418-1700.

Sincerely,


John A. Rogovin
Deputy General Counsel

-attachment

cc: The Honorable John D. Dingell
The Honorable Fred Upton
The Honorable Edward J. Markey

1. Does the FCC currently require an ILEC to make all of its network elements deployed between a central office and a customer's premises available on an unbundled basis where an ILEC has installed a hybrid copper-fiber transmission system that utilizes packet-switching technology and includes a copper subloop, a fiber subloop and a digital subscriber line access multiplexer (DSLAM)?

Only in limited circumstances. In addition to the network interface device, two network elements are involved in an architecture with a "hybrid copper-fiber transmission system that utilizes packet-switching technology and includes a copper subloop, a fiber subloop," and a DSLAM. First, this architecture involves the loop network element, which ILECs are obligated to unbundle under section 251(c)(3). See 47 C.F.R. § 51.319(a)(1). Second, this architecture involves the packet switching capability network element (including DSLAM functionality), which ILECs are not required to unbundle under section 251(c)(3) unless all four of the following conditions are present: "(i) [the ILEC] has deployed digital loop carrier systems . . . ; (ii) [t]here are no spare copper loops capable of supporting xDSL services the requesting carrier seeks to offer; (iii) [the ILEC] has not permitted a requesting carrier to deploy a [DSLAM] . . . and; (iv) [the ILEC] has deployed packet switching capability for its own use." See 47 C.F.R. § 51.319(c)(5). As a result, an ILEC is required to unbundle the loop network element (including the subloop network element, if requested) and, in limited circumstances, the packet switching capability network element. In the event that the four-part test for packet switching is not met, the ILEC is obligated to unbundle the loop network element but not any packet switching capability that may be present in the loop. Furthermore, the Commission's definition of the loop (and subloop) is technology neutral, as described below, and it therefore includes fiber as well as copper loops and subloops.

2. Please clarify the FCC's definition of a loop. In particular, does the definition of a loop include a DSLAM? Does the definition of a loop include a remote terminal?

No. As explained below, the Commission's definition of a loop does not include a DSLAM or remote terminal.

The Commission defines the loop network element as "a transmission facility between a distribution frame (or its equivalent) in an [ILEC] central office and the loop demarcation point at an end-user customer premises, including inside wire owned by the [ILEC]. The local loop network element includes all features, functions, and capabilities of such transmission facility. Those features, functions, and capabilities include, but are not limited to, dark fiber, attached electronics (except those electronics used for the provision of advanced services, such as [DSLAMs]), and line conditioning. The local loop includes, but is not limited to, DS1, DS3, fiber, and other high capacity loops." 47 C.F.R. § 51.319(a)(1). The definition of the loop, therefore, is technology neutral, and it includes both fiber and copper facilities. Note also that this definition expressly excludes electronics used for the provision of advanced services, including DSLAMs.

A remote terminal is an ILEC premise that is located between a distribution frame in an ILEC central office and the demarcation point at an end-user customer's premises. It therefore is placed in the middle of the loop, as the loop network element has been defined by the Commission. See 47 C.F.R. § 51.319(a)(1). The remote terminal may house various types of ILEC facilities, including packet switching capability. An ILEC, however, is not required to

unbundle the packet switching capability present in a remote terminal unless the Commission's four-part test for packet switching capability unbundling, described above, is met. *See* 47 C.F.R. § 51.319(c)(5).

Due to the complexity surrounding this issue, the Commission has sought comment on whether it is necessary to modify the definition of the loop and subloop network elements. *Next Generation Networks*, Further Notice of Proposed Rulemaking, 15 FCC Rcd 178506, 17857-60, paras. 119-128. *See also Line Sharing Reconsideration Order*, Further Notice of Proposed Rulemaking, 16 FCC Rcd 2101, 2129-30, paras. 62-64.

3. Is a remote terminal a network element that has to be made available by an ILEC on an unbundled basis to CLECs in accordance with section 251(c)(3) of the Act?

No. The Commission's list of unbundled network elements that must be made available pursuant to section 251(c)(3) is as follows: the loop and subloop; the network interface device; switching capability; interoffice transmission facilities; signaling networks and call-related databases; operator services and directory assistance; operations support systems; and the high frequency portion of the loop. *See* 47 C.F.R. § 51.319. A remote terminal is an ILEC premise that is located between a distribution frame in an ILEC central office and the demarcation point at an end-user customer's premises. It is therefore placed in the middle of the loop, as the loop network element has been defined by the Commission. *See* 47 C.F.R. § 51.319(a)(1). The remote terminal may house various types of ILEC facilities that are required to be unbundled. Nonetheless, the remote terminal is not considered an unbundled network element under the Commission's rules.

4. Does the FCC currently require an ILEC to provide line sharing on the fiber portion of a local loop facility that utilizes packet switching?

As a technical matter, the high frequency portion of the loop only exists on a copper loop. As explained below, however, the Commission has determined that, as a legal matter, an ILEC is required to provide unbundled access to the entire loop, including any fiber facilities that may be used to transmit data traffic from the remote terminal to the central office. There is a tension between this requirement, however, and the Commission's packet switching unbundling rules, which the Commission has sought to clarify in a recent Further Notice of Proposed Rulemaking.

In the *Line Sharing Order*, the Commission specifically required that ILECs unbundle the high frequency portion of the loop, which the Commission defined as "the frequency range above the voiceband on a copper loop facility that is being used to carry analog circuit-switched voiceband transmissions." 47 C.F.R. § 51.319(h). In the *Line Sharing Reconsideration Order*, however, the Commission acknowledged that "although the high frequency portion of the loop network element is limited by technology, i.e., is only available on a copper facility, access to that network element is not limited to the copper facility itself." 16 FCC Rcd at 2107, para. 10. Thus, the Commission clarified that "the requirement to provide line sharing applies to the entire loop, even where the incumbent has deployed fiber in the loop (e.g., where the loop is served by a remote terminal as part of a digital loop carrier system.)" *Id.* at 2106, para. 10. In doing so, the Commission stated that the use of the word "copper" in its definition of the high frequency portion of the loop "was not intended to limit an [ILEC's] obligation to provide [CLECs] with

access to the fiber portion of a loop for the provision of line shared xDSL services.” *Id.* (emphasis added).

Accordingly, pursuant to the Commission’s rules, a CLEC seeking to line share when there is fiber deployed in the loop can access the high frequency portion of a copper loop by collocating a DSLAM at the ILEC’s remote terminal and then leasing access to dark fiber or the subloop network element for the transmission of data traffic from the remote terminal to the central office. Some ILECs, however, take the position that the fiber subloop carrying data traffic between the remote terminal and central office is part of the ILEC’s packet switching network and, therefore, not required to be unbundled unless the Commission’s four-part test for packet switching capability unbundling is met. The Commission clarified in a subsequently released order that the *Line Sharing Reconsideration Order* in no way modified the Commission’s four-part test for packet switching capability unbundling. 16 FCC Rcd at 4628, paras. 1-2.

Finally, in light of the technical complexity surrounding this issue, the Commission expressly sought comment on whether its existing packet switching rules are adequate to enable CLECs to line share when there is fiber deployed in the loop in the Further Notice of Proposed Rulemaking that accompanied the *Line Sharing Reconsideration Order*. *Id.* at 2127-30, paras. 55-64.

5. Must an ILEC currently provide unbundled access to a fiber subloop that the ILEC is using to carry data traffic between an ILEC’s DSLAM in its remote terminal and the ILEC’s central office?

An ILEC is required to unbundle the subloop network element, which the Commission has defined as “any portion of the loop that is technically feasible to access at terminals in the [ILEC’s] outside plant. An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole or pedestal, the network interface device, the minimum point of entry, the single point of interconnection, the main distribution frame, the remote terminal, and the feeder/distribution interface.” 47 C.F.R. § 51.319(a)(2). An ILEC, however, is not required to unbundle packet switching capability that may be associated with a subloop unless the Commission’s four-part test for packet switching capability unbundling, described above, is met. 47 C.F.R. § 51.319(c)(5).

As described in the line sharing context above, some ILECs take the position that the fiber subloop carrying data traffic between the remote terminal and central office is part of the ILEC’s packet switching network and, therefore, not required to be unbundled unless the Commission’s four-part test for packet switching unbundling is met. Some CLECs contend that, in this situation, the Commission’s four-part test is met and that without access to the full loop network element, they lack an economic means to provide transmission from the remote terminal to the central office. This and other next generation network architecture issues are currently pending before the Commission in several rulemakings. See *Line Sharing Reconsideration Order*, Further Notice of Proposed Rulemaking, 16 FCC Rcd at 2127-30, paras. 55-64; *Next Generation Networks*, Further Notice of Proposed Rulemaking, 15 FCC Rcd at 17856-62, paras. 118-133.